de bron	eTwinning	tet RAPISARDI DA VINCI
LICEO LINGUISTICO STATALE ILARIA ALPI CESENA	CHANGING FOR CLIMATE CHANGES	Zespół Szkół nr 1 im. Stanisława Staszica w Szczytnie

Experiment 6: Consequences on solubility of CO_2 in warmer sea-water

1. INTRODUCTION

According to the researchers, more than half of the CO_2 absorbed worldwide ends up in the ocean. Krill, plankton and seaweed play a significant role in this. The ocean stores 50 times more CO_2 than the atmosphere and 20 times more than plants on land. So oceans have an important role. But can seawater absorb an infinite amount of CO_2 and does it always work as well?

2. ORIENTATION

What are the consequences on solubility of CO_2 in warmer sea-water?

3. PREPARATION

3.1. Materials:

- 2 test tubes
- Test tube clamp
- Measuring cup
- Hot water bath
- Sparkling water

3.2. Method:

- Fill the measuring cup with sparkling water.

- Heat a test tube in the hot water bath for one minute.
- Place the 2 test tubes (cold and warmed) simultaneously in the measuring cup with sparkling water.

4. RESULTS

Observations:

Observe the gas evolution at the surface of the 2 test tubes

There were bubbles in the test tube with warm sparkling water, a precipitate appeared in the test tube with cold sparkling water

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5. REFLECTION

Can you make the connection between this experiment and the effect of greenhouse gases on the ocean? Remember that if you see more gas-bubbles, this means that the gas is less solvable.

Yes,the hotter the water, the more bubbles are formed. And more bubbles mean less solvable gas, which is harmful.

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6. e-book

Take several pictures during the experiment. You can also film it.